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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/361,803	07/27/1999	MITSUHIRO KUNIEDA	35.G2440	5976

5514 7590 03/31/2006

FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK, NY 10112

EXAMINER

RODEE, CHRISTOPHER D

ART UNIT	PAPER NUMBER
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1756

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/361,803

Applicant(s)

KUNIEDA ET AL.

Examiner

Christopher RoDee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24 and 26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 24 and 26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9 March 2006 has been entered.

Claim Rejections - 35 USC § 103

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki in US Patent Application Publication 2004/0214101 in view of Organic Photoreceptors for Imaging Systems to Borsenberger, pp. 6-19, 181, 182 & 203-211, and further in view of JP 01-84265, or Kawamorita *et al.* in US Patent 5,202,214, or Kovacs in US Patent 5,373,313.

These rejections were presented in the last Office action. Applicants have amended the instant claims to specify that the exposure means comprises a semiconductor laser having an oscillating wavelength of 380 to 450 nm. The transmittance of the charge transport layer has also been amended to be at least 90 %.

With respect to the more limited exposure wavelength, JP '265, Kawamorita, and Kovacs each disclose the use of semiconductor laser exposure sources for electrophotographic imaging apparatuses. Each of these references discloses exposure with this laser within the

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range of 400 to 500 nm, which is within the disclosure of Suzuki's exposure wavelengths and within the scope of the instant claims. With respect to the transmittance of the charge transport layer, the artisan would expect Suzuki's charge transport layer to have little absorbance (i.e., a large transmittance) in the wavelength of exposure because if the charge transport layer absorbed a large amount of light in the exposure wavelength it would reduce the charge generation effect in the underlying charge generation layer.

In the last Office action the Examiner criticized the evidence of record as not being persuasive for the reasons as summarized in applicants' recent response (p. 5). Applicants traverse the rejection because Suzuki teaches equivalence for the triarylamine, stilbene, and hydrazone charge transport compounds. Based on this teaching the Comparative Example employing a hydrazone derivative should, in applicants' view, be deemed representative of Suzuki. Applicants also stress that data is present in the specification for transmittance at 380 and 445 nm, which brackets the range now claimed. Applicants also provide a figure representing the transmittance of the Suzuki stilbene compound. This Figure, as discussed in the response, shows that the transmittance at an oscillating wavelength between 380 and 450 nm is below 90 %. The Comparative Example 1 uses a hydrazone with a transmittance of 0 % at 380 nm and about 20 % at 445 nm.

The Examiner has carefully considered applicant's remarks in response to the last Office action. Although Suzuki does teach that triarylamine, stilbene, and hydrazone charge transport compounds are alternatives for each other, the recent submission by applicants showing different transmission characteristics suggests that the compounds are not equivalents for all exposure wavelengths. The Examiner also must stress that it is not the charge transport compounds that have the specified transmittance, such as 100 % transmittance, as asserted in the remarks. The claims specify that the charge transport layer has a transmittance of at least

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90 %. The charge transport layer contains the charge transport (transfer) material and, as seen in the specification examples, a binder resin (see spec. p. 42). It is the combination of these materials that make up the charge transport layer and it is this combination that produces the transmittance. The transmittance of the entire charge transport layer is tested in the specification (spec. p. 43) while the recent submission only provides the transmittance of Suzuki's charge transport compound. The evidence is not providing a direct comparison of the same materials and does not provide a determination of Suzuki's charge transport layer transmittance. Additionally, the evidence submitted concerning the transmittance of the charge transport compounds must be in the form of a Rule 132 declaration.

Applicants' remarks are not persuasive to overcome the rejection because it appears and there is not sufficient evidence that the comparative compounds in the specification and Suzuki are not alternatives for each other at the claimed absorption wavelength. The rejections are maintained.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher RoDee whose telephone number is 571-272-1388. The examiner can normally be reached on most weekdays from 6:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

cdr
28 March 2006



CHRISTOPHER RODEE
PRIMARY EXAMINER